

How to Treat Left Main disease

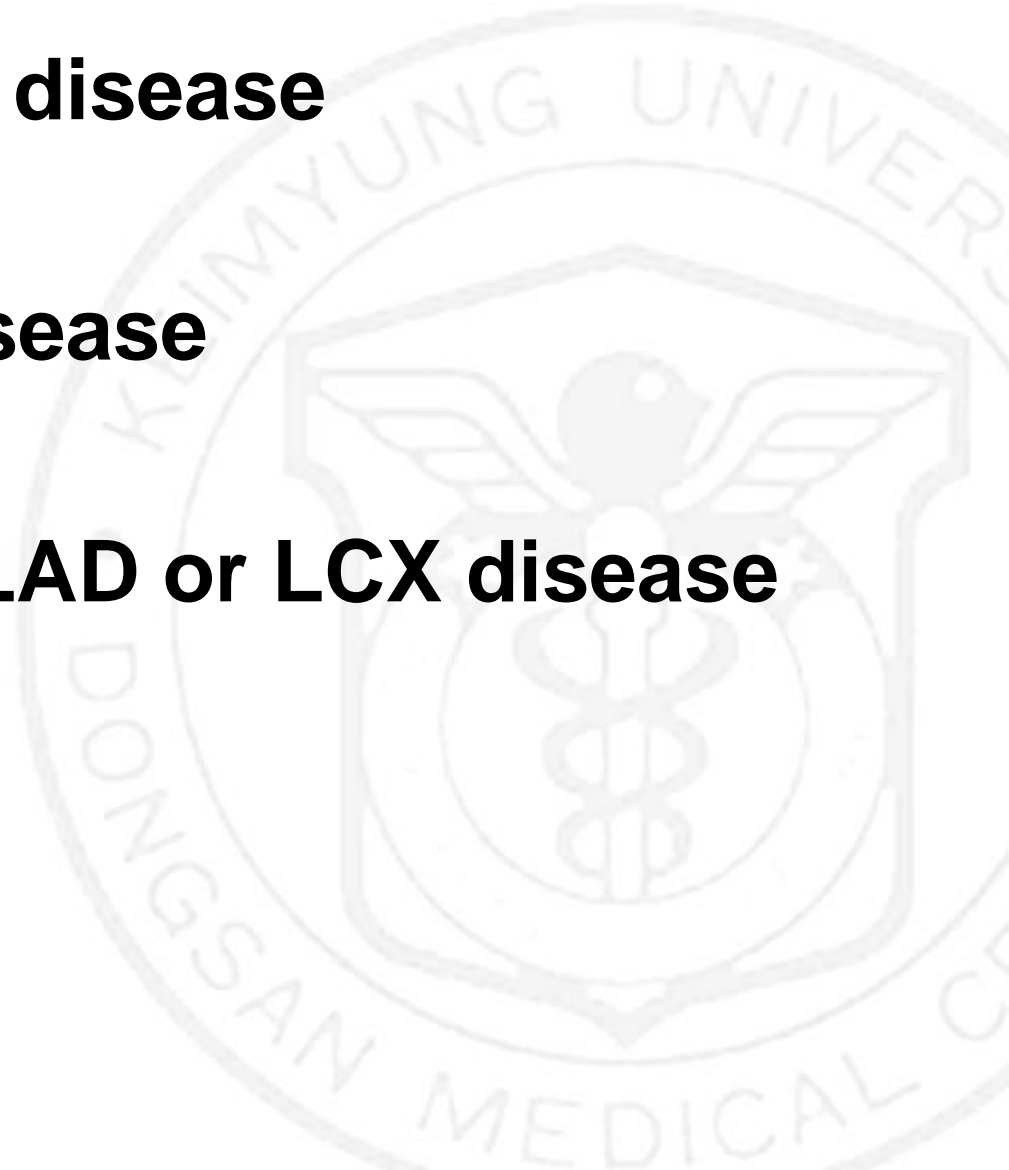
Integrated Use of FFR and IVUS

Chang-Wook NAM, MD, PhD

Keimyung University Dongsan Medical Center, Daegu, Korea

Various LM diseases

- **LM ostial or shaft disease**
- **LM bifurcation disease**
- **LM disease with LAD or LCX disease**

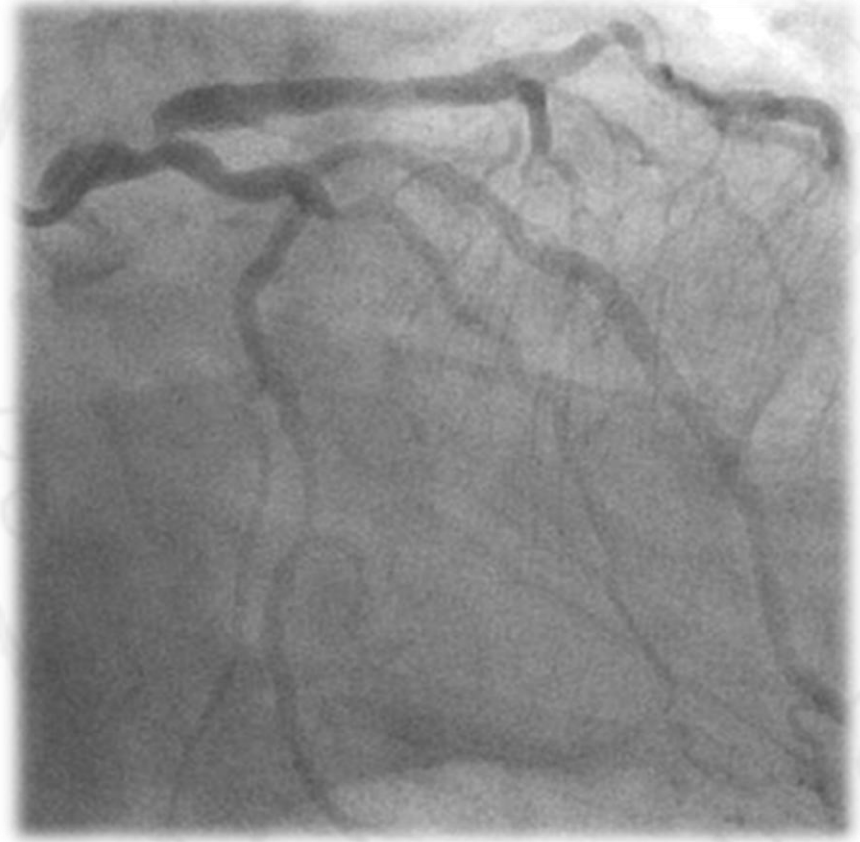
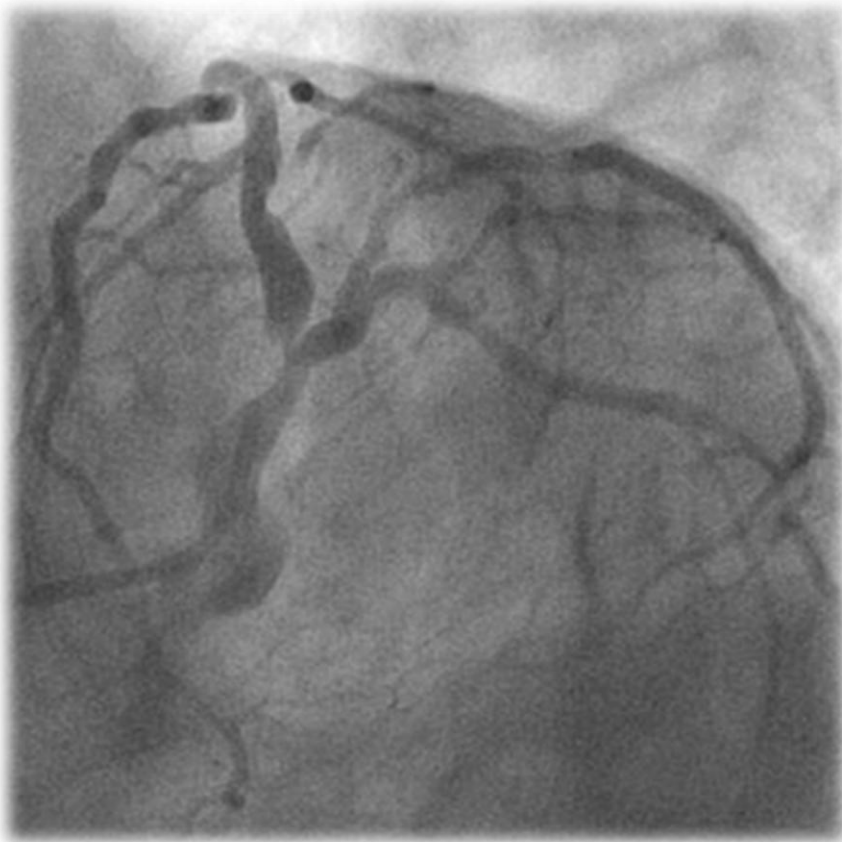


LM bifurcation PCI with FFR & IVUS

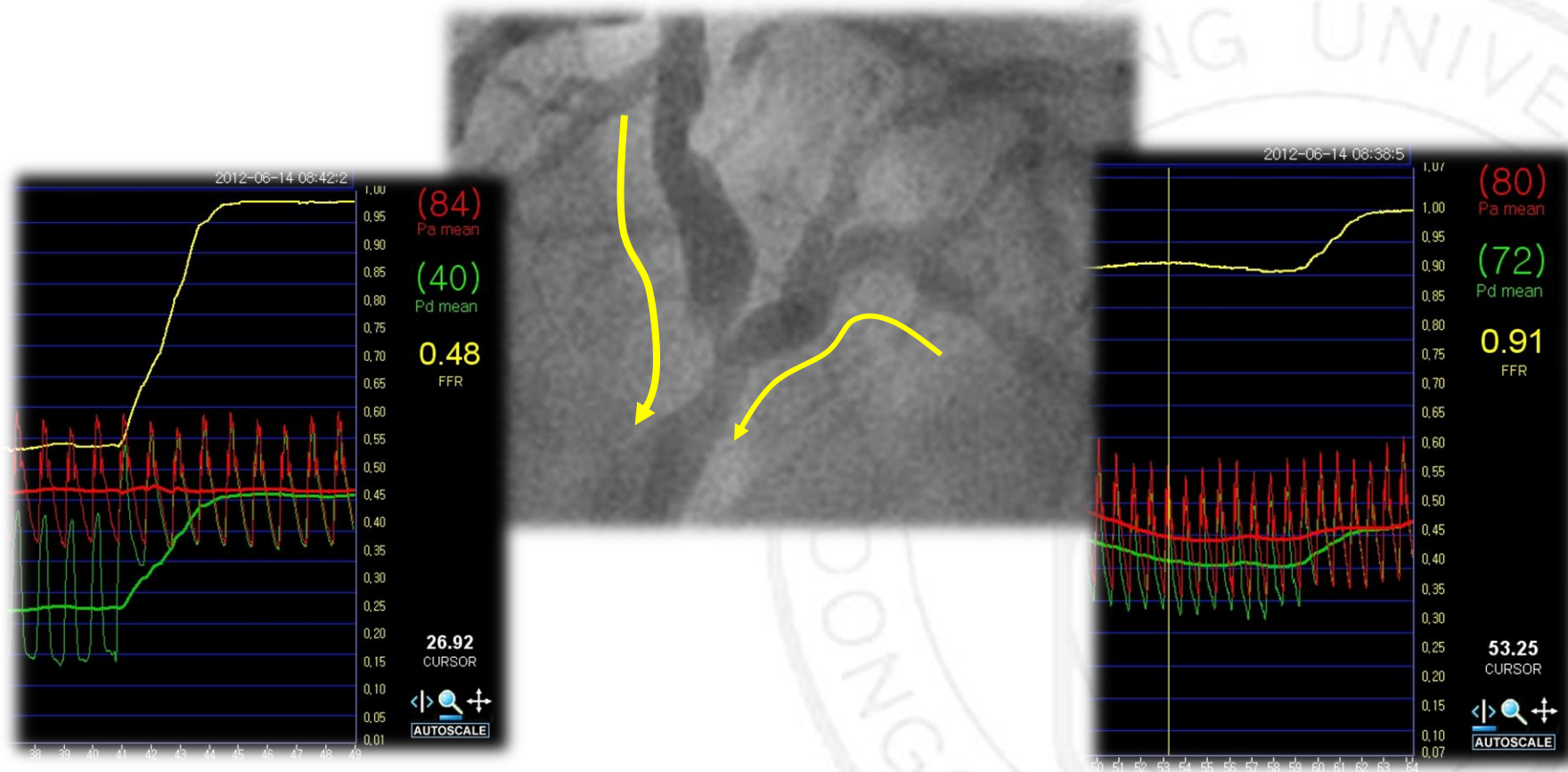
62/Male, Angina for 1 month

CVRF: HTN, Dyslipidemia, Smoking

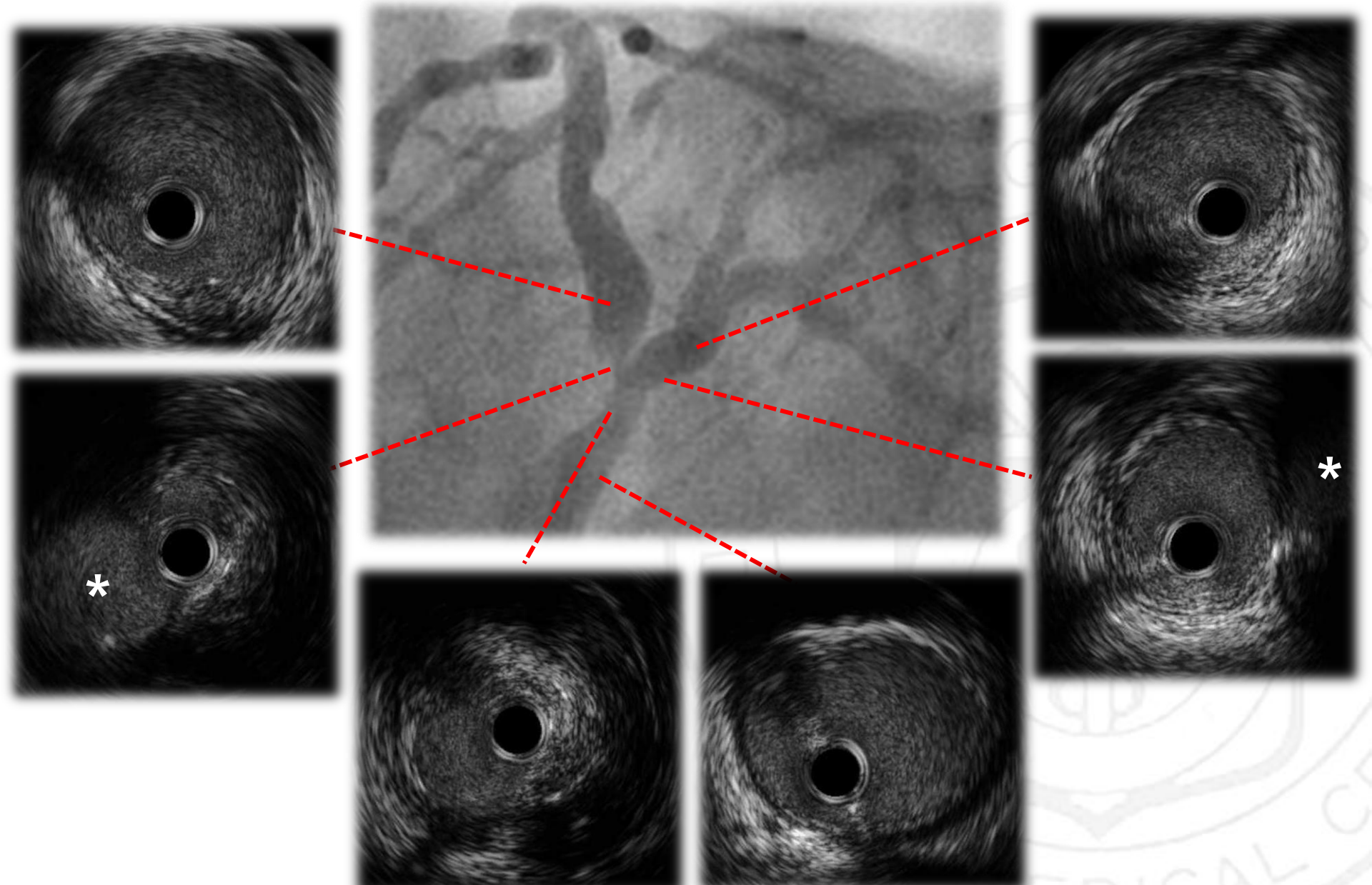
TMT: ST depression in multi-leads



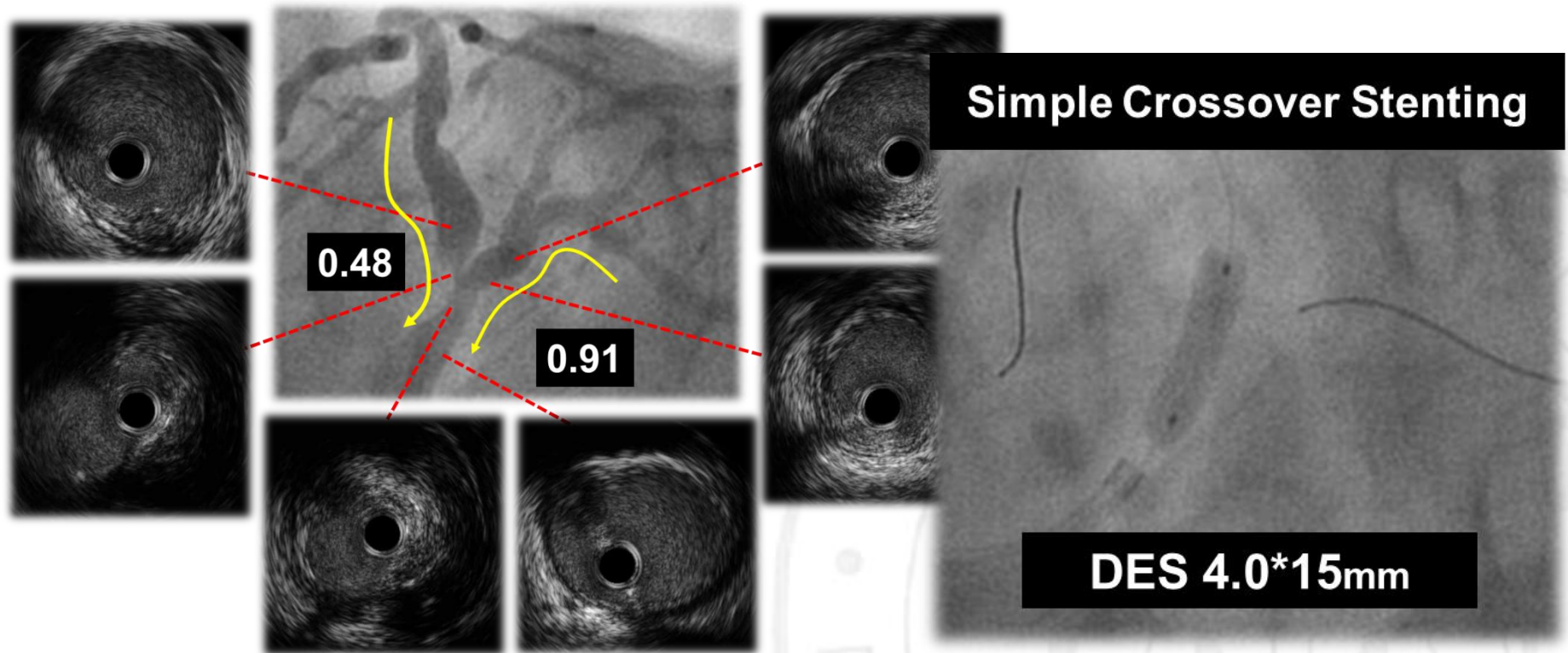
How to Evaluate LM bifurcation: Functional



How to Evaluate LM bifurcation: Anatomical

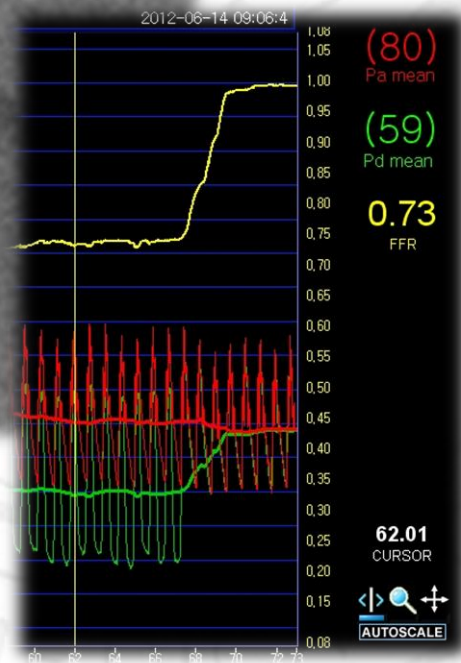
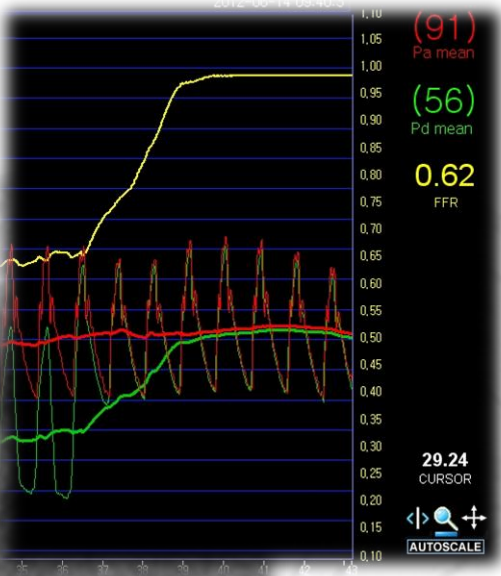
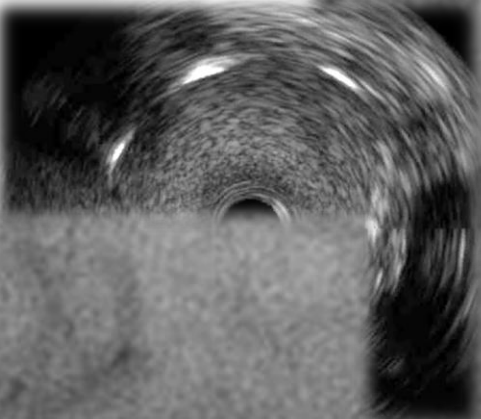
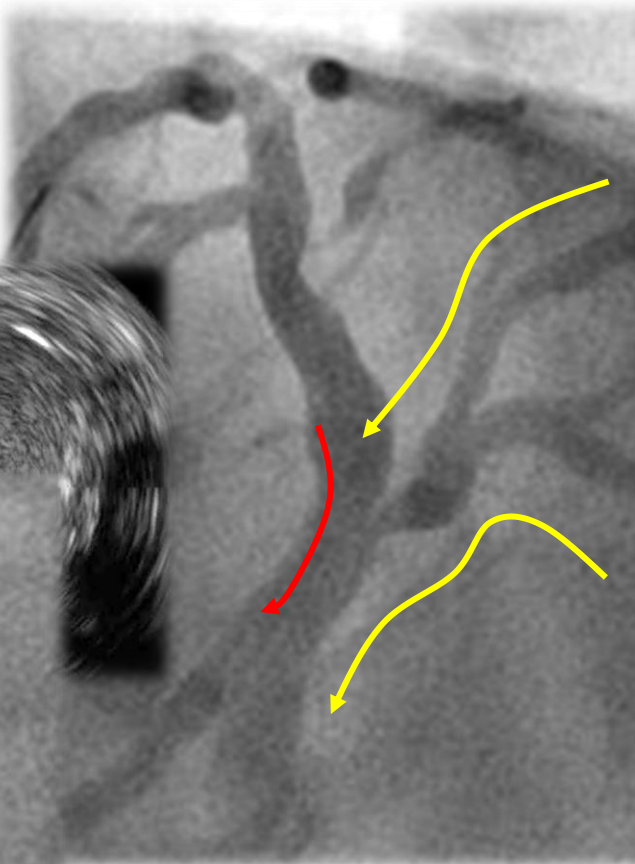
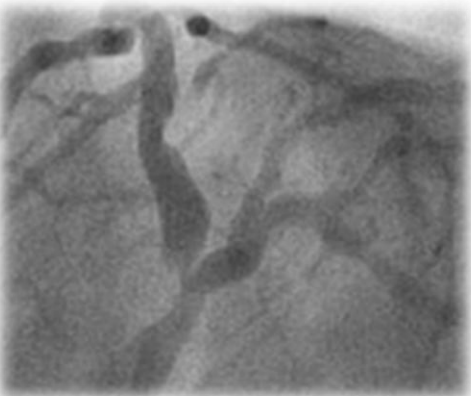


What is your Decision?



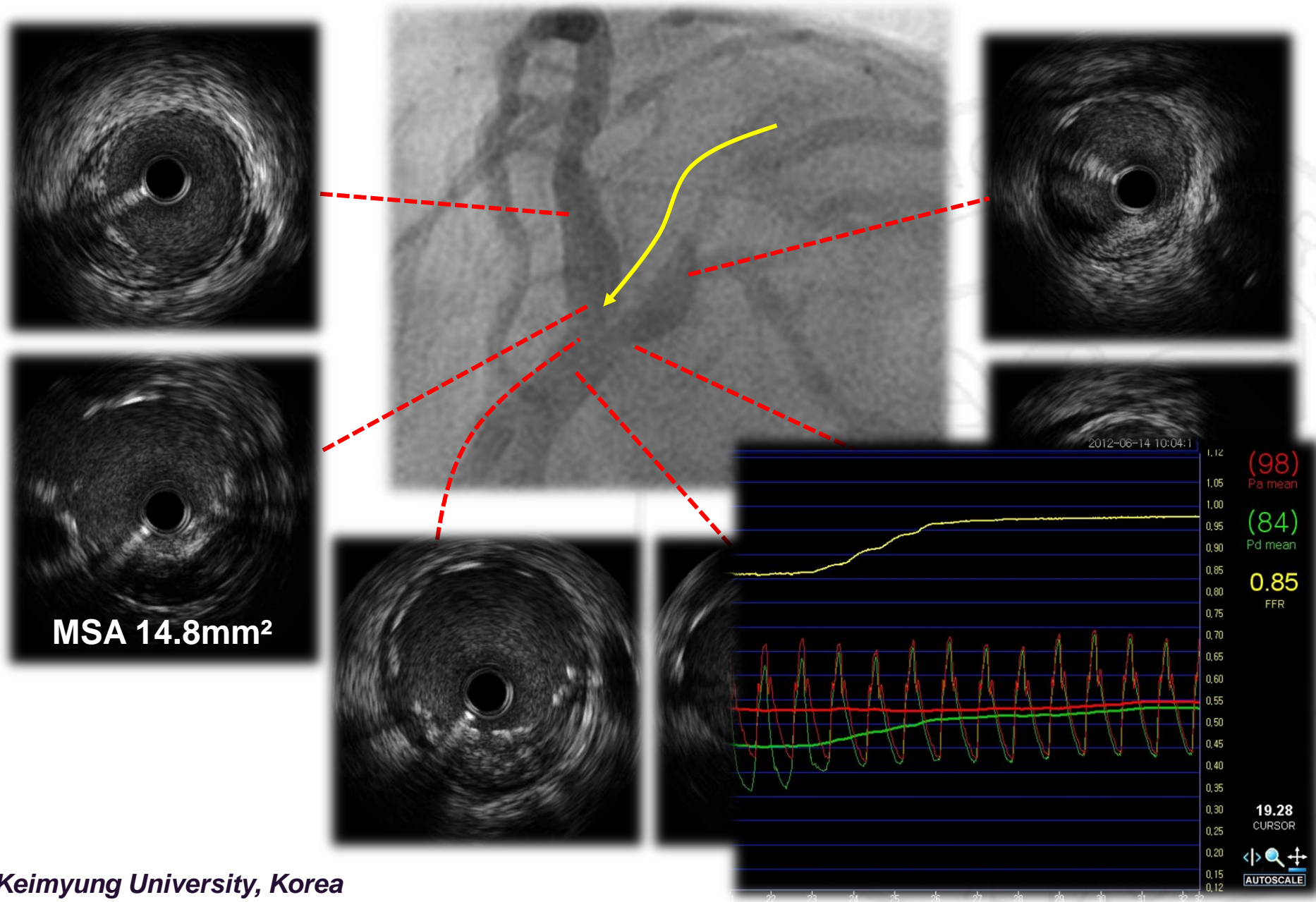
- Location of plaque, from distal LM to proximal LAD
- Plaque free in ostial LCX
- Large stent due to large reference vessel diameter
- Large plaque in distal LM
- Acute angle between LAD and LCX

How to Assess Jailed osLCX



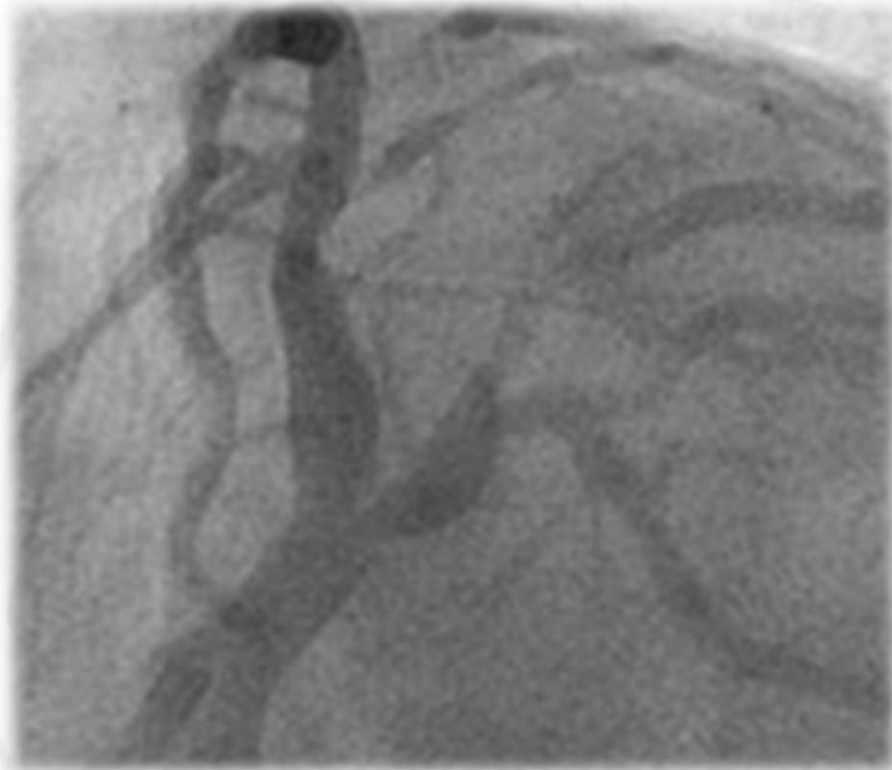
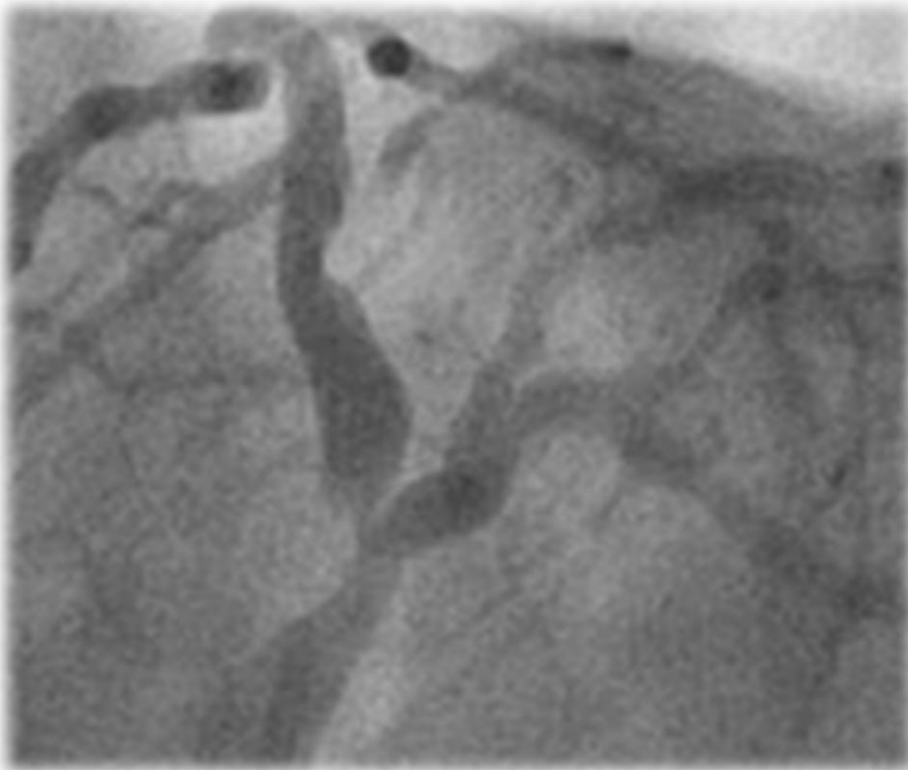
**4.0x15mm &
2.5x20mm**

Post PCI Evaluation by IVUS & FFR



LM bifurcation PCI with IVUS & FFR

Before, During, After



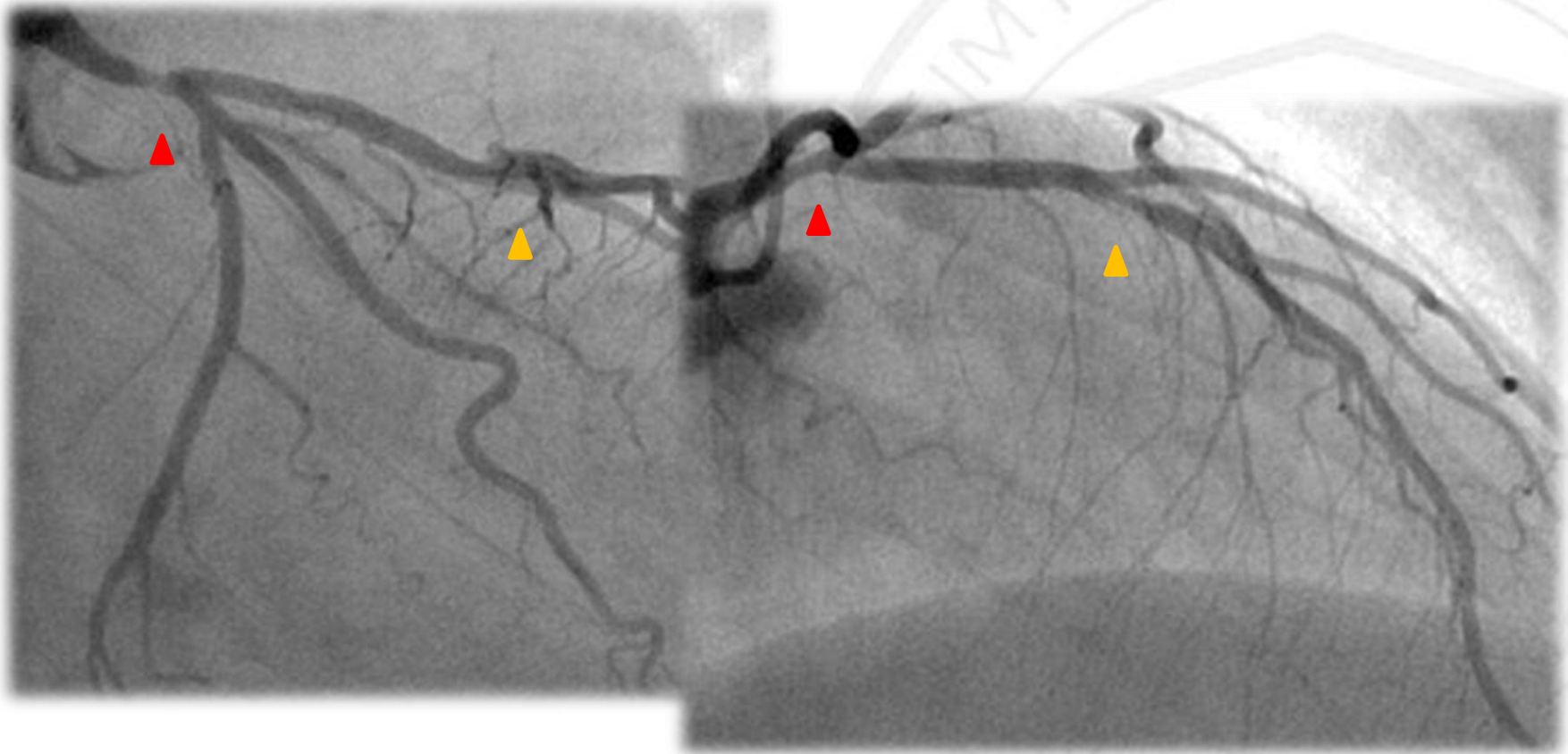
Follow-up TMT: (-), 12.1 METs

LM disease with LAD disease

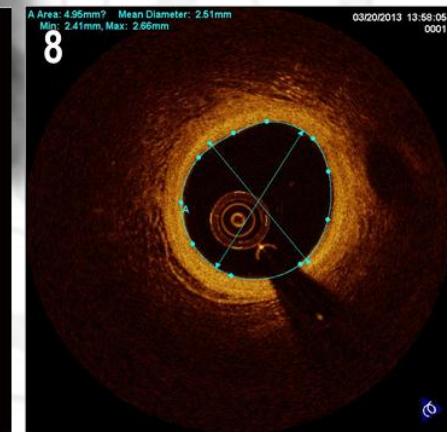
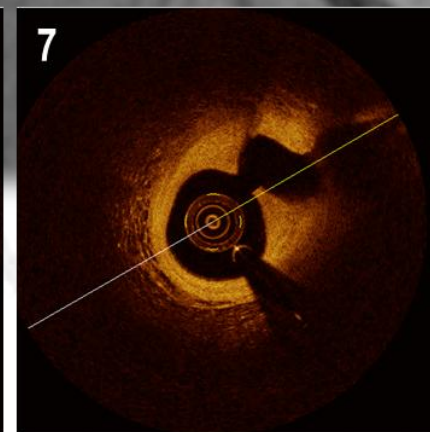
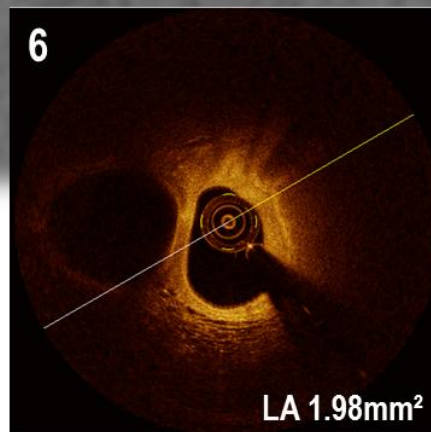
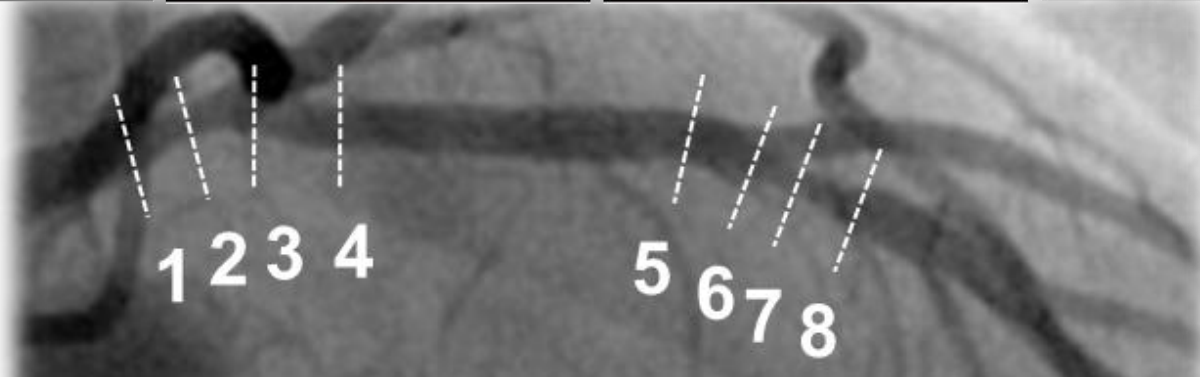
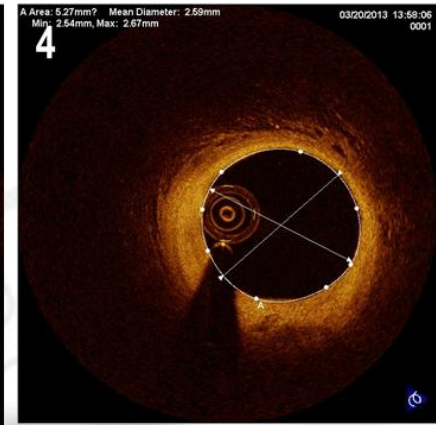
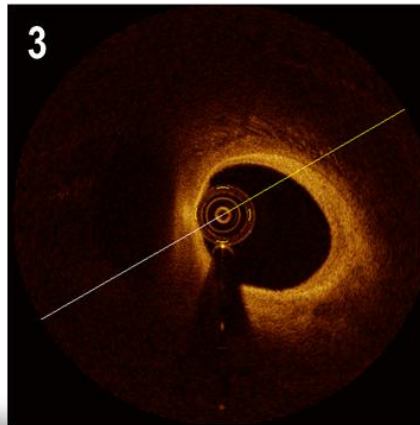
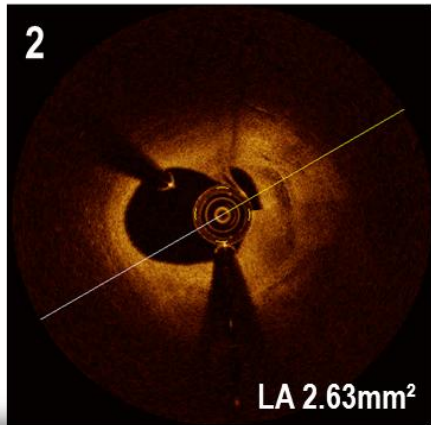
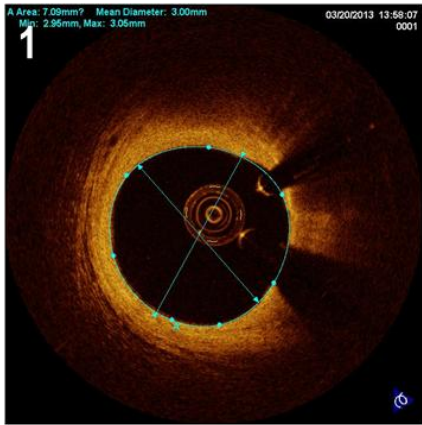
61/Female, aggravated angina

CVRF: HTN

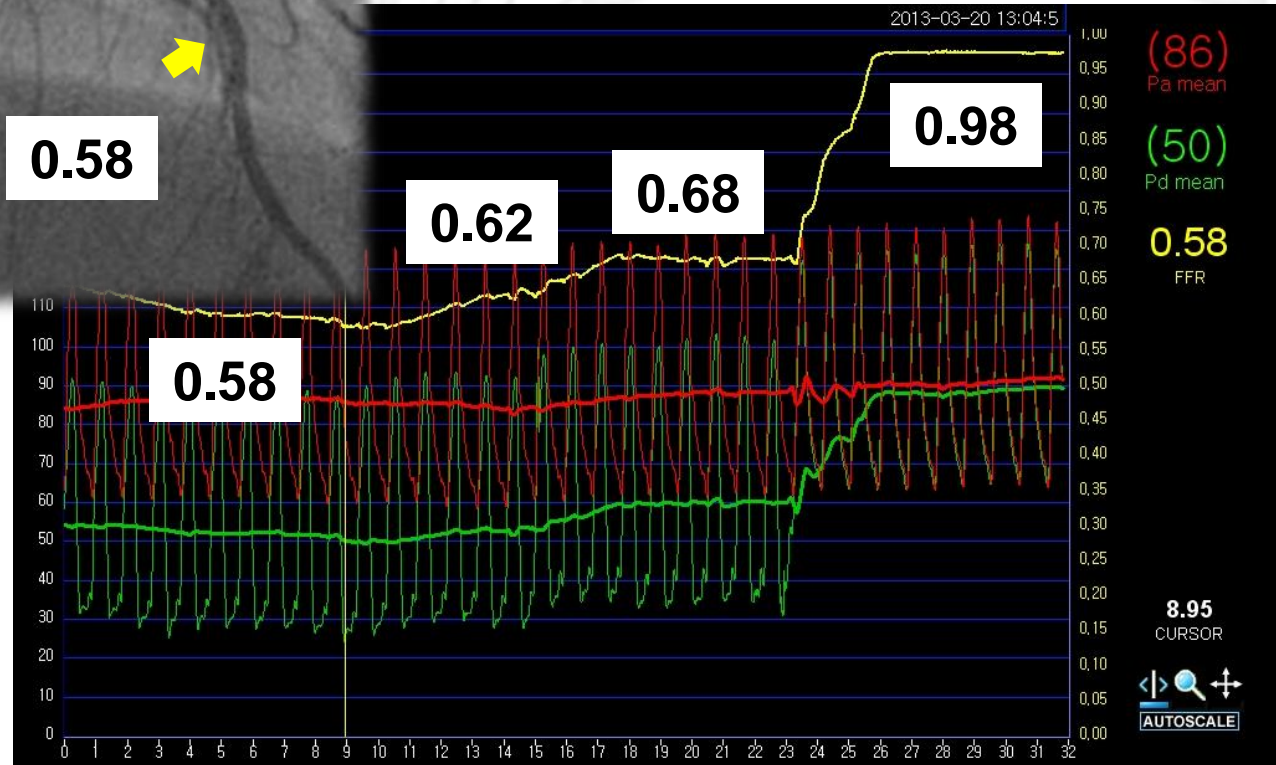
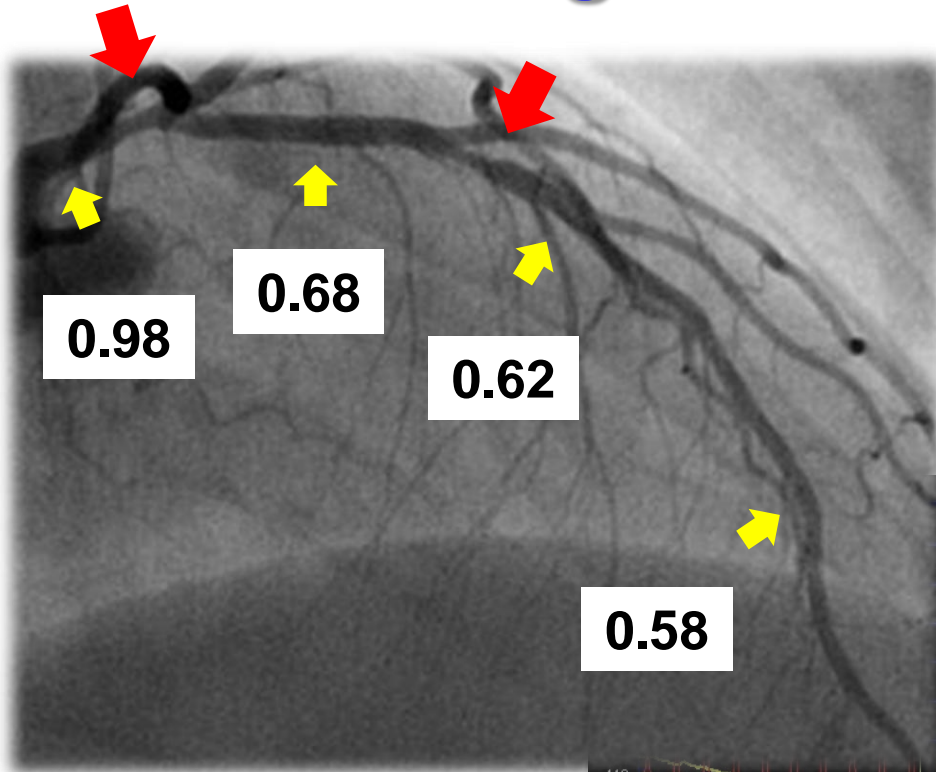
TMT: ST depression in multi-leads



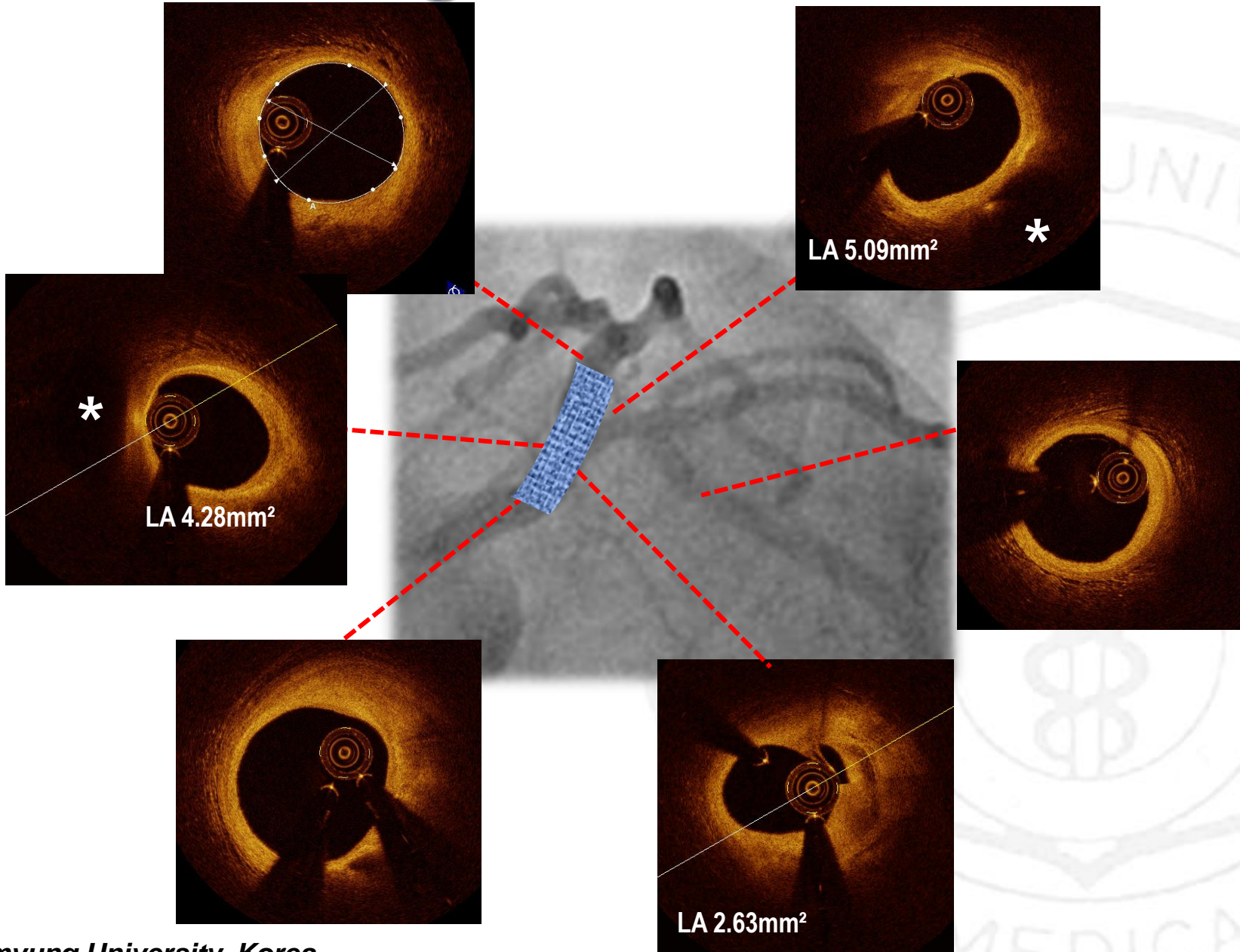
How to Evaluate

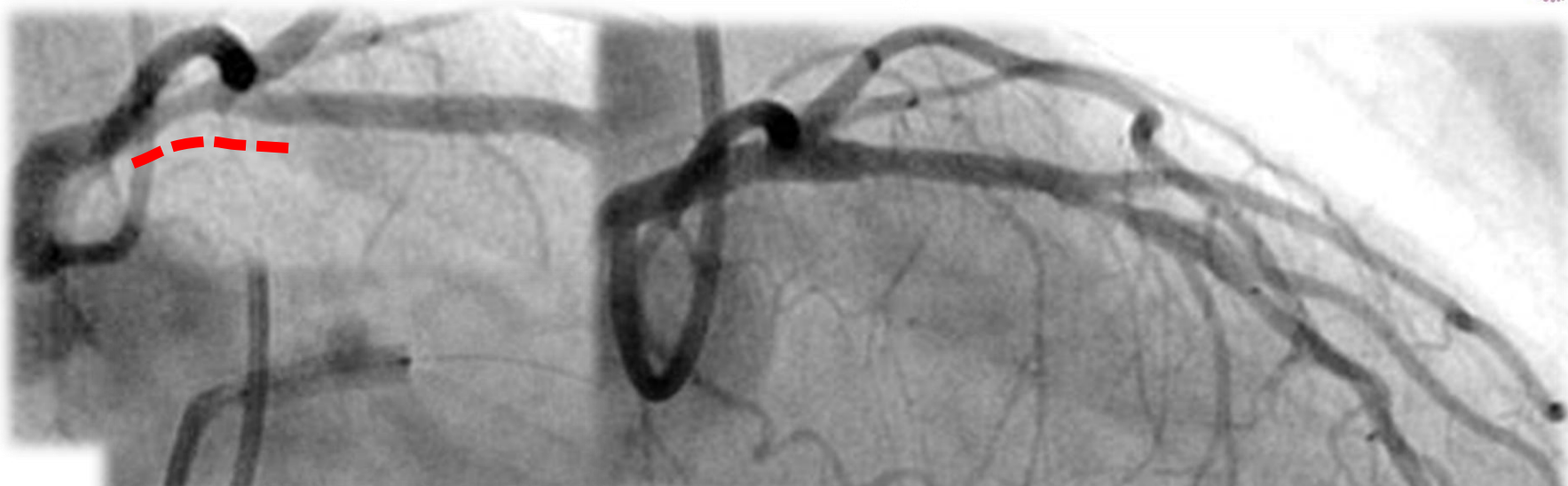


FFR can guide “Where to Treat”

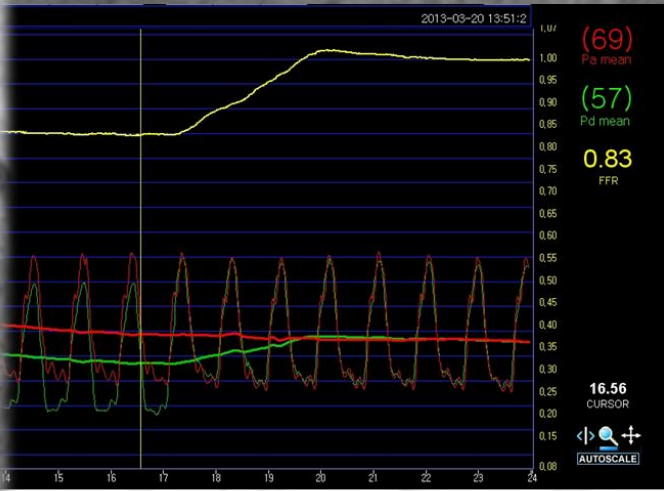
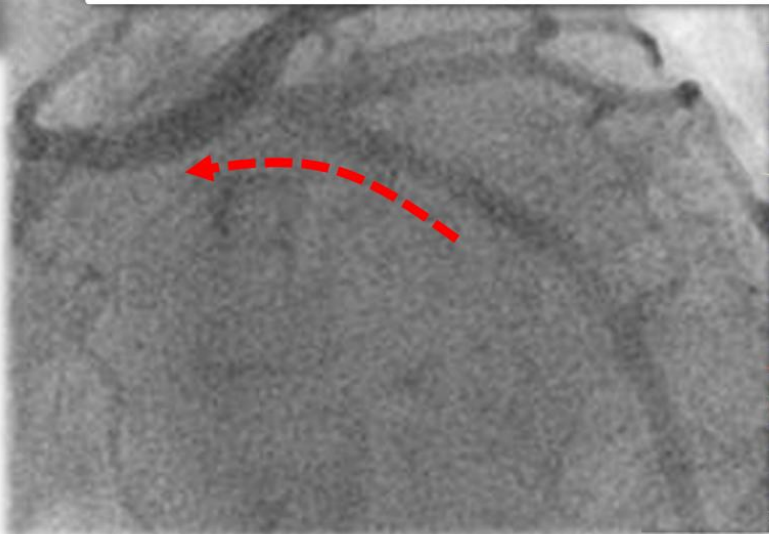


OCT can guide “How to Treat”

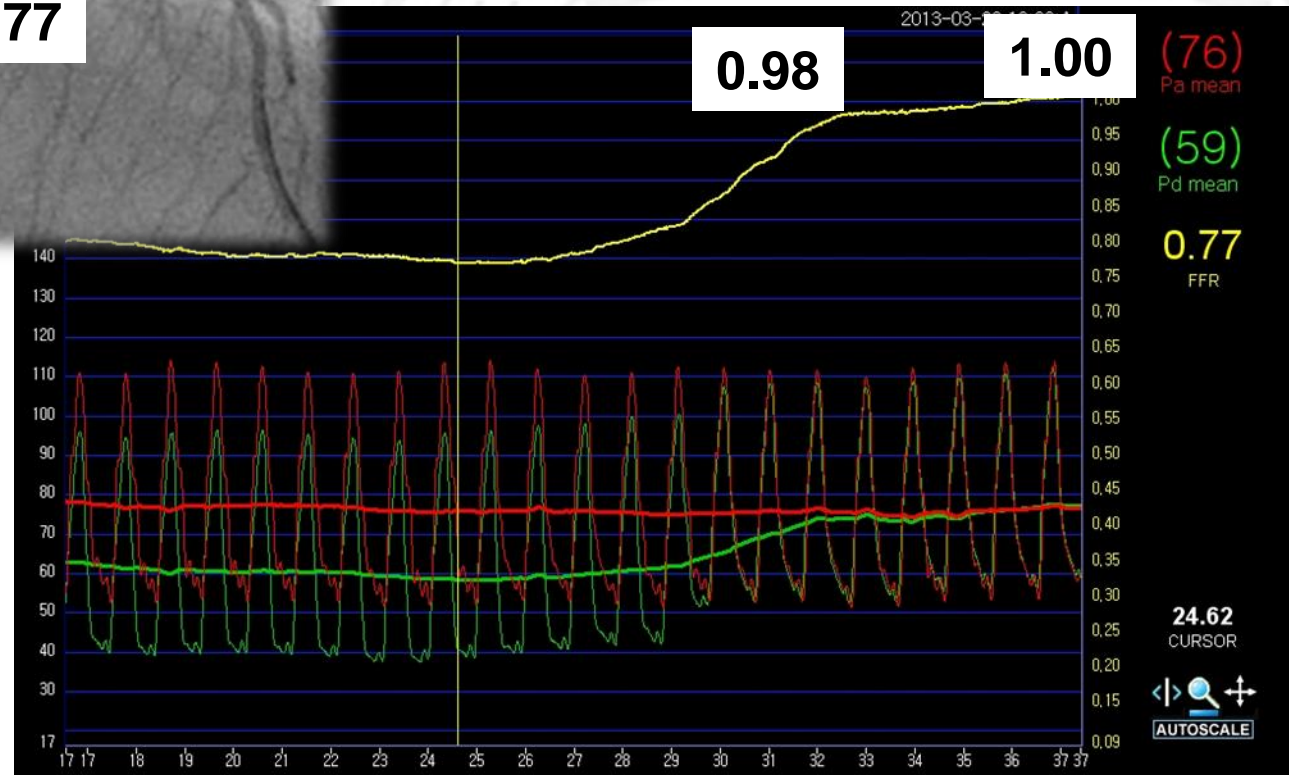
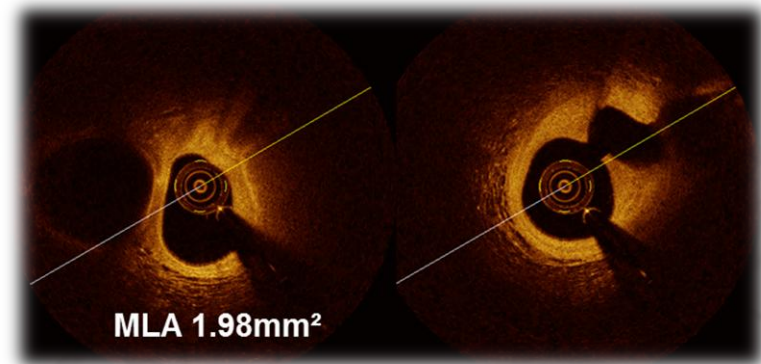
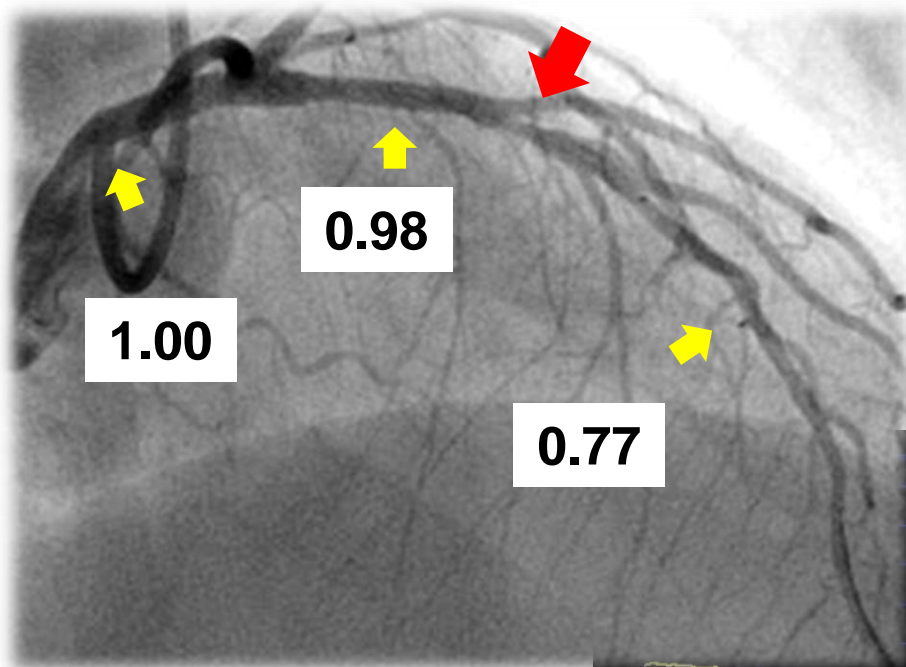




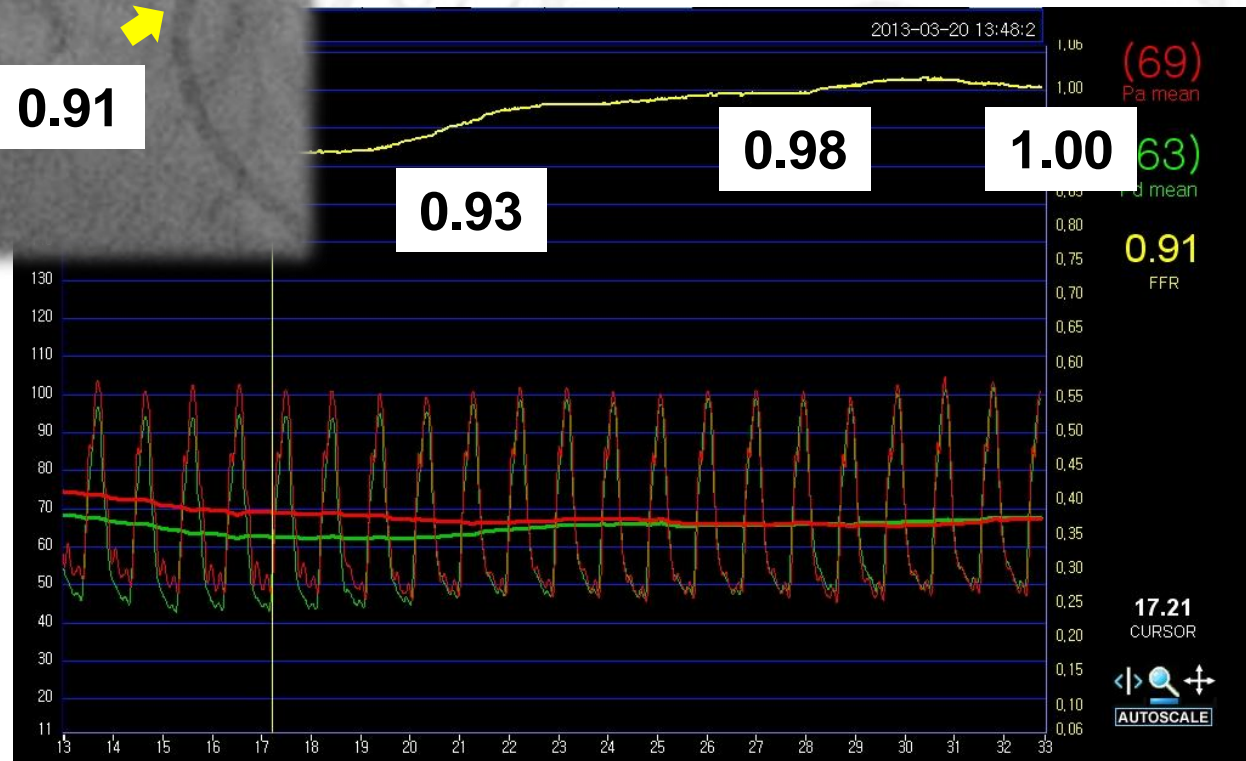
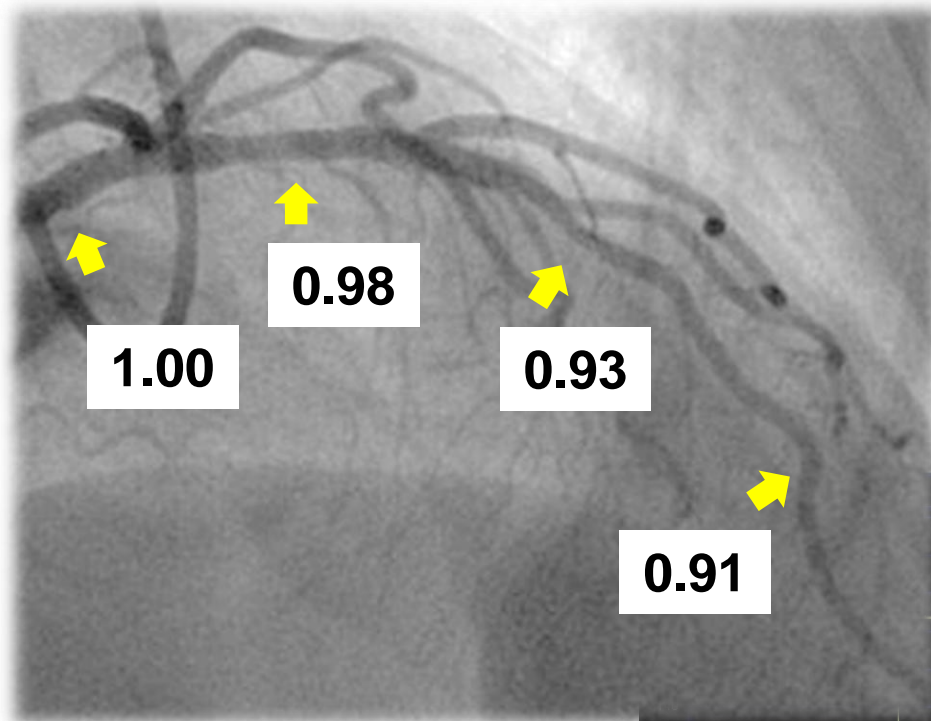
FFR for Jailed LCX ostium



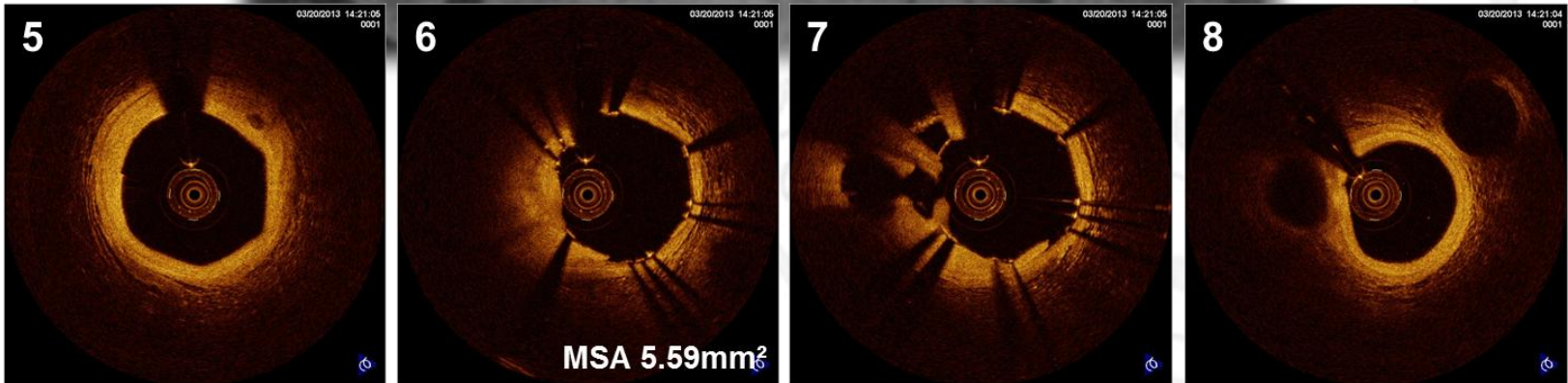
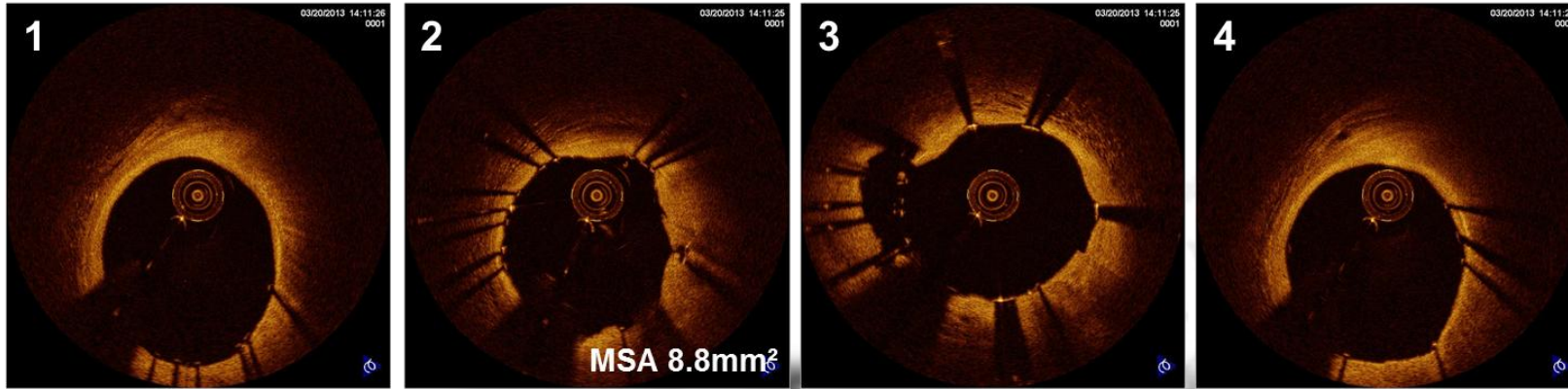
Whether to Treat?: tandem lesion



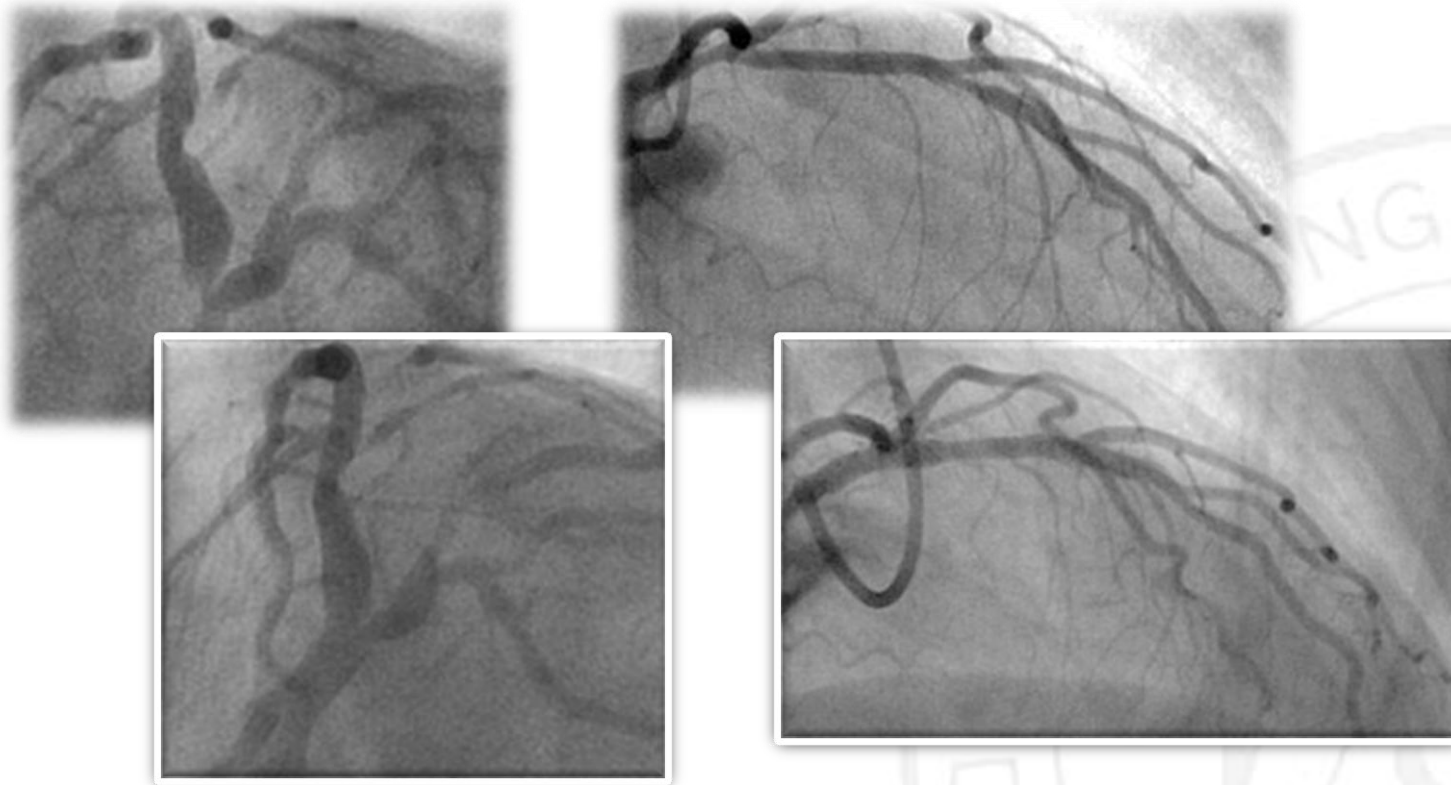
FFR can show "What you did"



OCT can show "What you did"



Take Home Message



Integration of FFR & Imaging-guided lesion evaluation can help to find the best way before, during, and after PCI.